Approved Minutes of the Technical Advisory Committee Meeting January 10, 2012

Attendees: Roger Thompson Mark Bannon

Bill Zabiloski Rodney Pingree
Daniel Wilcox Gail Center
Scott Stewart Craig Heindel
Denise Johnson-Terk Ernest Christianson

Spencer Harris Justin Willis Claude Chevalier Steve Revell

Mary Clark

Scheduled meetings:

February 14, 2012 1-4 PM Liquor Control Conference Room-

Montpelier

March 20, 2012 1-4 PM TBA

April 17, 2012 1-4 PM TBA

Agenda:

The agenda was reviewed and accepted.

Minutes:

The draft minutes of the December 12, 2011 meeting were reviewed and accepted.

Legislative Session:

Ernie reviewed **H.464** which prohibits hydraulic fracturing for hydrocarbon production in Vermont. Portions of Vermont are underlain by a shale formation laid down about 450 million years ago. This shale formation also extends into Canada where there has been attempts to extract hydrocarbons with some success. There are some areas in Vermont that have a potential for hydrocarbon production if prices rise to higher levels per Larry Becker, Vermont State Geologist. Steve said he supported a study of the effects of hydrofracturing but would not want a good technique to be unreasonably restricted. Steve said that based on conferences he has attended that it appears that highly technical methods are being used with careful controls with few problems. Ernie said that one problem that has occurred is with the trucking of large amounts of wastewater recovered from the hydraulic fracturing process to wastewater treatment plants that are not well equipped to process the contaminants. There are reports of aquifers that have been contaminated with methane released by the hydraulic fracturing process and that earthquakes have occurred near the injection wells. Mary reported that a lot of work has

been done at Pennsylvania Universities that did not find widespread problems, though some people feel that the Universities are on the side of the hydrocarbon industries. She noted that similar work done in New York has raised more concerns. Craig said that he heard that New York is proposing to hire as many as 140 more regulators because of the large number of wells that are being constructed.

Ernie also reviewed **H.469** which requires notice to neighboring property owners when the isolation distances for proposed water and/or wastewater systems extends onto neighboring properties. The bill would require notice by certified mail, indexing of the notice in the land records to the property affected, require notice if in the course of the construction process it is determined that the plans must be altered in a way that would create or increase the potential impact on neighboring property, and allow affected neighbors to request a review by the Agency to determine if an alternate design could be permitted with less impact on the neighbor. The bill does not give the Agency authority to require a change in the design. The bill does not give any guidance on how the decision should be made in areas such as cost to the permittee, whether the proposed project should be limited in size such as reducing the number of bedrooms in a house or the number of lots in a proposed subdivision. The committee also noted that the language proposed in section 1973(h) states that the overshadowing does create an impact on the title of the affected property which might support an argument that the overshadowing is a taking if the overshadowing is extensive enough. Ernie said that the DEC position is against adoption. Ernie said that about one-half of all projects involve some amount of overshadowing and that one-half of those resulted in questions to the Regional Office staff. Mark and others noted that virtually all of these cases resulted in questions to the designer some of which involved a lot of time and requests for additional information and site visits. Ernie said that about 8 cases had been appealed to court some of which came back to Anne Whiteley for review. Anne said that in a couple of cases a judge had asked her to do an informal mediation to see if the concerns of the parties could be resolved. Ernie noted that the bill as proposed would result in a large amount of additional work for the Regional Office staff.

Roger asked if DEC supported any changes in the existing statute on overshadowing. Ernie said that changes based on language Anne put together last year to simplify the paperwork would probably be supported. The proposed language included a change that would only require that the plans and information related to the overshadowing be included with the notice rather than all of the information required for the permit application.

Mark asked, rhetorically, if the Agency would object to the New Hampshire approach where if a well is constructed with its isolation distance extending onto the neighboring property the neighbor is not restricted by the isolation distance. The well owner signs a waiver of isolation distance request and assumes the risk of any contamination.

Claude said that the problem is that Vermont has excessively large isolation distances. He said that he has drilled many wells with isolation distances between 30' and 50' without any problems. Steve and Ernie noted that existing Vermont rules allow for

reductions in isolation distance on a case by case basis and that reductions are being approved.

Mark said that other states have smaller isolation distances and do not seem to be having lots of problems. Ernie said that in his research looking at other states they do seem to be finding indications of nitrate contamination just as was found in Vermont in the work that Bruce Douglas and others did earlier. Mary said that the State of Maine remains satisfied with a 100' isolation distance.

Craig said that in the overshadowing case at the Environmental Court the issue is that there is an assumed effluent plume running across the neighboring property rather than just the extension of an isolation distance onto neighboring property.

There was discussion about who would represent TAC at the upcoming legislative hearing. Mark will try to attend along with Steve, Craig, or Spencer.

S.183: S.183 proposes to require water quality testing of all new sources. This bill is a repeat of S.77 from last year's session that was passed by the Legislature but which was vetoed by the governor. Gail said that the Health Department Laboratory has the capacity to do the chemical testing but is very concerned about the cost of creating and operating the data base that is proposed in the bill. The funding for the existing lead program and its data base have been reduced and the Health Department does not want to take on a new program without the resources needed to do the work. Bill asked why manganese, currently listed as a secondary contaminant, was added to the list of required testing. Gail said that national work is looking at the need for a health based standard. Gail said that if the groundwater standard changes to less than 300 PPM it will become a drinking water standard.

Scott asked if S.183 would apply to all water supplies meeting the definition of potable in the <u>Wastewater System and Potable Water Supply Rules</u>. Ernie said that the bill is aimed at single family residences because the other potable water systems are already required to test new water sources.

H.470: Rodney said that this bill, which regulates discontinuance of public community water supplies is aimed at protecting existing users of the small systems that wish to stop operation. The bill requires that all of the existing users have access to an alternate water source prior to discontinuing the public community system.

Fluvial Hazard Issues:

Dan said that he had encountered a new issue with an application where Act 250 might prohibit the construction of a septic system in a mapped FEHA (Fluvial Erosion Hazard Area). There was discussion about how much Act 250 could regulate this area. Ernie said that FEHA issues are controlled by the Rivers Management Section and their determinations on the boundaries and limitations on construction are binding on Act 250 decisions.

Executive Committee:

It was decided that Mark should be added to the executive committee to represent the Professional Engineering issues.

Items prioritized for discussion with high, low, and medium ranking

- 1. Soil identification vs. perc test **medium**
- 2. Curtain drain with presumption of effectiveness **high**
- 3. Revisions to desktop hydro chart **medium**
- 4. Minimum amount of sand under a mound **high**
- 5. Water Supply Rule update **high**
- 6. Seasonal High Water Table determination for performance based systems **high**
- 7. Wastewater Strength

Executive Committee

Steve Revell, Ernest Christianson, Roger Thompson Alternates – Chris Thompson, Spencer Harris, Claude Chevalier, Craig Heindel

Subcommittees

Hydrogeology -

Craig Heindel, Bill Zabiloski, Mark Bannon, Scott Stewart, and Steve Revell.

Overshadowing of Isolation Distance Issues –

Anne Whiteley, Ernie Christianson, Roger Thompson, John Beauchamp, Gail Center, Chris Thompson

UIC Rules and Geothermal Wells -

Craig Heindel, Steve Revell, Roger Thompson, Ernie Christianson, Scott Stewart, Rodney Pingree, Kim Greenwood, Cindy Parks

SHWT Monitoring -

Craig Heindel, Steve Revell, Roger Thompson, Ernie Christianson, Bill Zabiloski, Dan Wilcox

UIC Rules and Disposal of Wastewater from Water Treatment Systems –

John Beauchamp, Gary Adams, Roger Thompson, Ernie Christianson, Gail Center, Cindy Parks

Wastewater Strength -

Mary Clark, Cindy Parks, Peter Boemig, Bill Zabiloski, Roger Thompson, John Akielaszek,